

June 08, 2016 10:36:59 AM



147232

Bell Only

Page 1

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

*** 1 ***

*** 1 ***

Approvals:

Process Plan:

Date: 6/10/16 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

[illegible]

JUN 21 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : ☐			

Page 2

June,08, 2016 10:36:59 AM

Reference:

Stop ***NR2***

JUN 21 2016

0.02

Quality Control

165

JUN 21 2018

SA 6/20/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

June 08, 2016 10:37:19 AM

Page 1

Work Order ID: 147232

147232

Parent Item: D412-698-023

D412-698-023

Parent Item Name: Automatic Door Opener (fits LH or RH)

Start Date: 6/9/2016

Required Date: 6/13/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 07-07-12 JLM
IPP rev B ecn 1207 08.07.03 EC verified by:LL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3552-11		Manufactured	No			120	Each	19.0000	1	1			
----------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D3552-11

Door Prop

**

DAS
28
9-89

Location	Loc Qty	Loc Code
FG	4	
128491	2	
80345	2	
ST363	15	
142260	5	
145244	10	

DAS
27
9-89

1X SH 6/20/16

D3594-043

D3594-043		Manufactured	No			120	Each	11.0000	1	1			
-----------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D3594-043

Floor Doubler Assembly, LH

**

DAS
28
9-89

Location	Loc Qty	Loc Code
Quarantine	1	
144905	1	
ST504	10	
	10	

DAS
27
9-89

Special for Bell.

use →

SH 6/20/16

D3594-044

D3594-044		Manufactured	No			120	Each	15.0000	1	1			
-----------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D3594-044

Floor Doubler Assembly, RH

**

DAS
28
9-89

Location	Loc Qty	Loc Code
Quarantine	1	
144906	1	
ST504	14	
	14	

Special for Bell

use →

SH 6/20/16

DAS
27
9-89

Picklist Print

June 08, 2016 10:37:19 AM

Page 2

Work Order ID: 147232

147232

Parent Item: D412-698-023

D412-698-023

Parent Item Name: Automatic Door Opener (fits LH or RH)

Start Date: 6/9/2016

Required Date: 6/13/2016

Start Qty: 1.00

Required Qty: 1.00

D3594-5	Manufactured	No	120	Each	0.0000	1	(1)	DAS 28 9-89
D3594-5								
Doubler								
D3622-1	Manufactured	No	120	Each	0.0000	2	(2)	DAS 28 9-89
D3622-1								
Ball Stud								
MS20426AD4-1	Purchased	No	120	Each	4,439.000	2	2	DAS 28 9-89
MS20426AD4-4								
Rivet								

Location	Loc Qty	Loc Code
GA	1986	
125445	1986	
ST312	2453	
m132536	2453	
MS21073L5	Purchased	No
MS21073L5		
Anchor Nut		
DAS 27 9-89		
16.0000	1	(1)
		DAS 28 9-89

Location	Loc Qty	Loc Code
ST298	16	
m132680	16	
NAS1149D0516J	Purchased	No
NAS1149D0516J		
Washer		
DAS 27 9-89		
239.0000	2	(2)
		DAS 28 9-89

Location	Loc Qty	Loc Code
ST264	239	
M129706	39	
M134943	200	

SA 147232
6/6/16

Under Review Notification

Raised By: M. BELLAVANCE

Product #: D412-698-023

Date: 16.02.25

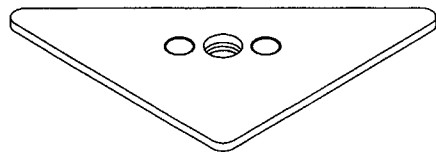
Product Name: AUTOMATIC DOOR OPENER KIT

Part Number (D-Part and 9-Digit)	Drawing/Document & Current Affected Revision	"Y" or "N" Required for Each Part							Reserved ECN Log Number	Instructions Relevant to Each Part
		HOLD SHIPMENT	Red Tag/Quarantine Stock	Advise Customers	Stop Production	Re-Work Stock	IPP Under Review	Product Specifications Under Review		
D3594-043/-044/-3/-4	D3594 Rev. B	N	Y	N	Y	N	Y	N	16-531	See below.
D412-698-023	IIN-D412-698 Rev. E	N	Y	N	Y	N	Y	N	16-531	See below.

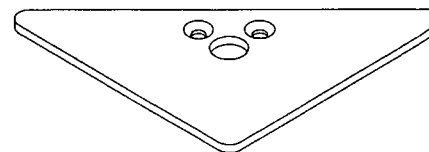
Description of Issue:

Current stock OK to ship to customers other than Bell Helicopter Mirabel.

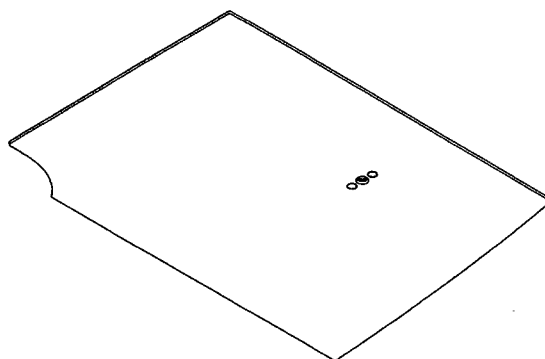
If shipping to Bell Helicopter Mirabel: must ship D412-698-023 with enlarged D3594-043/-044/-3/-4. Eng. To sign off deviations on W/Os.
Change: addition of material, 0.25", on the inboard and outboard edges as shown to facilitate installation with existing equipment.



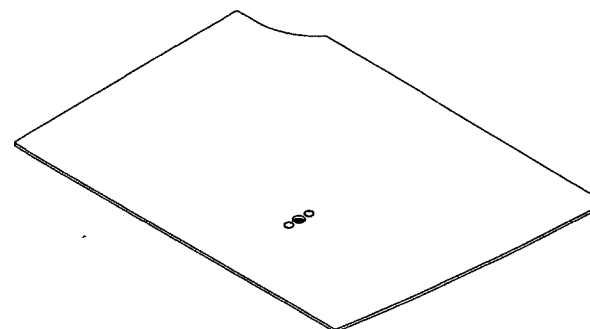
D3594-041 DOOR DOUBLER ASSEMBLY



D3594-5 DOOR DOUBLER



D3594-043 FLOOR DOUBLER ASSEMBLY

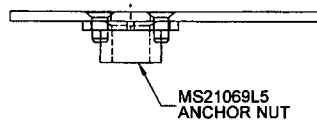
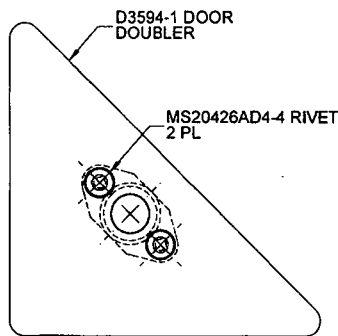


D3594-044 FLOOR DOUBLER ASSEMBLY

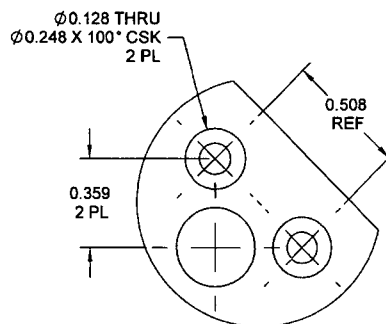
RELEASED
08.08.26

B	REFORMAT TO B SIZE DRAWING. SHEET 2 ADD -5.	AJS	08.05.14
A	NEW ISSUE	MB	07.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN	MB		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.05.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		DRAWING NO.	REV. B
		D3594	SHEET 1 OF 4
		TITLE	SCALE
		DOUBLER	NTS
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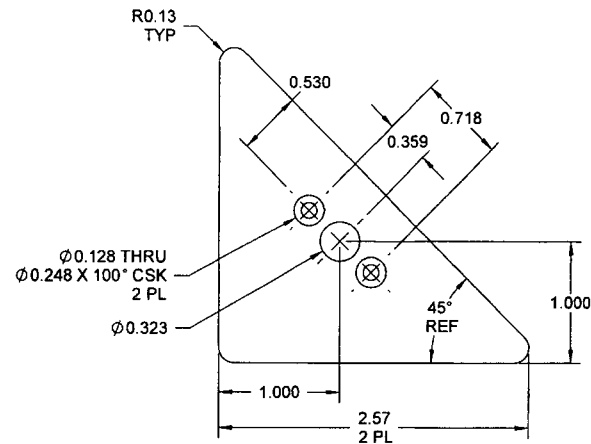
QTY. -041	PART NUMBER	DESCRIPTION
X	D3594-041	DOOR DOUBLER ASSEMBLY
1	D3594-1	DOOR DOUBLER
1	MS21069L5	ANCHOR NUT
2	MS20426AD4-4	RIVET, CSK



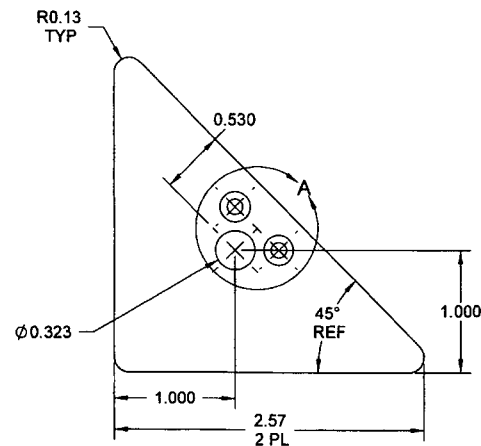
4 D3594-041 DOOR DOUBLER ASSEMBLY



DETAIL A
SCALE 2X



D3594-1 DOOR DOUBLER



5 D3594-5 DOOR DOUBLER B

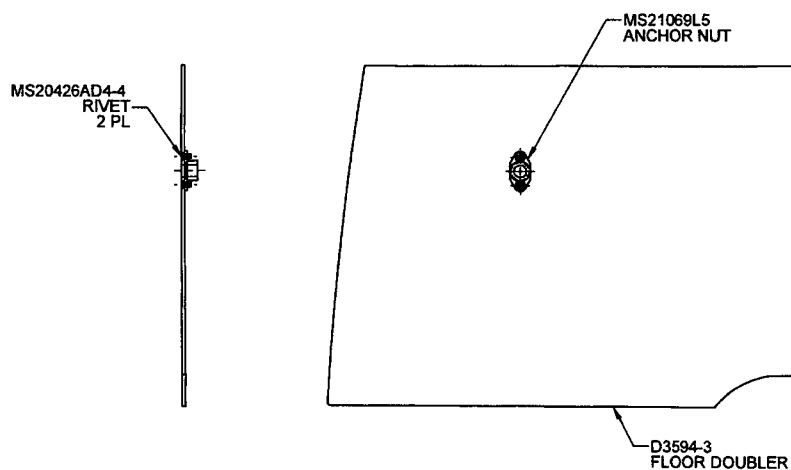
NOTES:

- 1) MATERIAL: -1 & -5
6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK,
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-041" USING FINE POINT PERMANENT INK MARKER
- 5) IDENTIFY WITH DART P/N "D3594-5" USING FINE POINT PERMANENT INK MARKER
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WEIGHT -041: 0.04 lbs
-5: 0.03 lbs

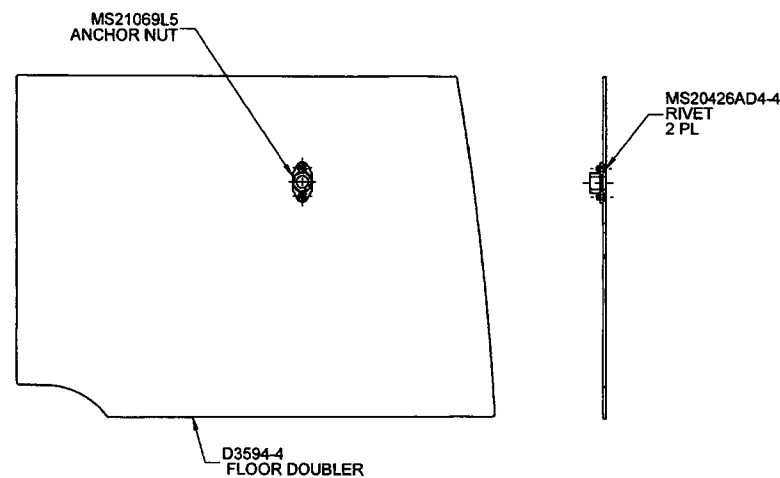
RELEASED
08-06-26-14

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AUS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3594	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
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QTY. -043	QTY. -044	PART NUMBER	DESCRIPTION
X		D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	X	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
1		D3594-3	FLOOR DOUBLER, LH
	1	D3594-4	FLOOR DOUBLER, RH
1	1	MS21069L5	ANCHOR NUT
2	2	MS20426AD4-4	RIVET, CSK



D3594-043 FLOOR DOUBLER ASSEMBLY



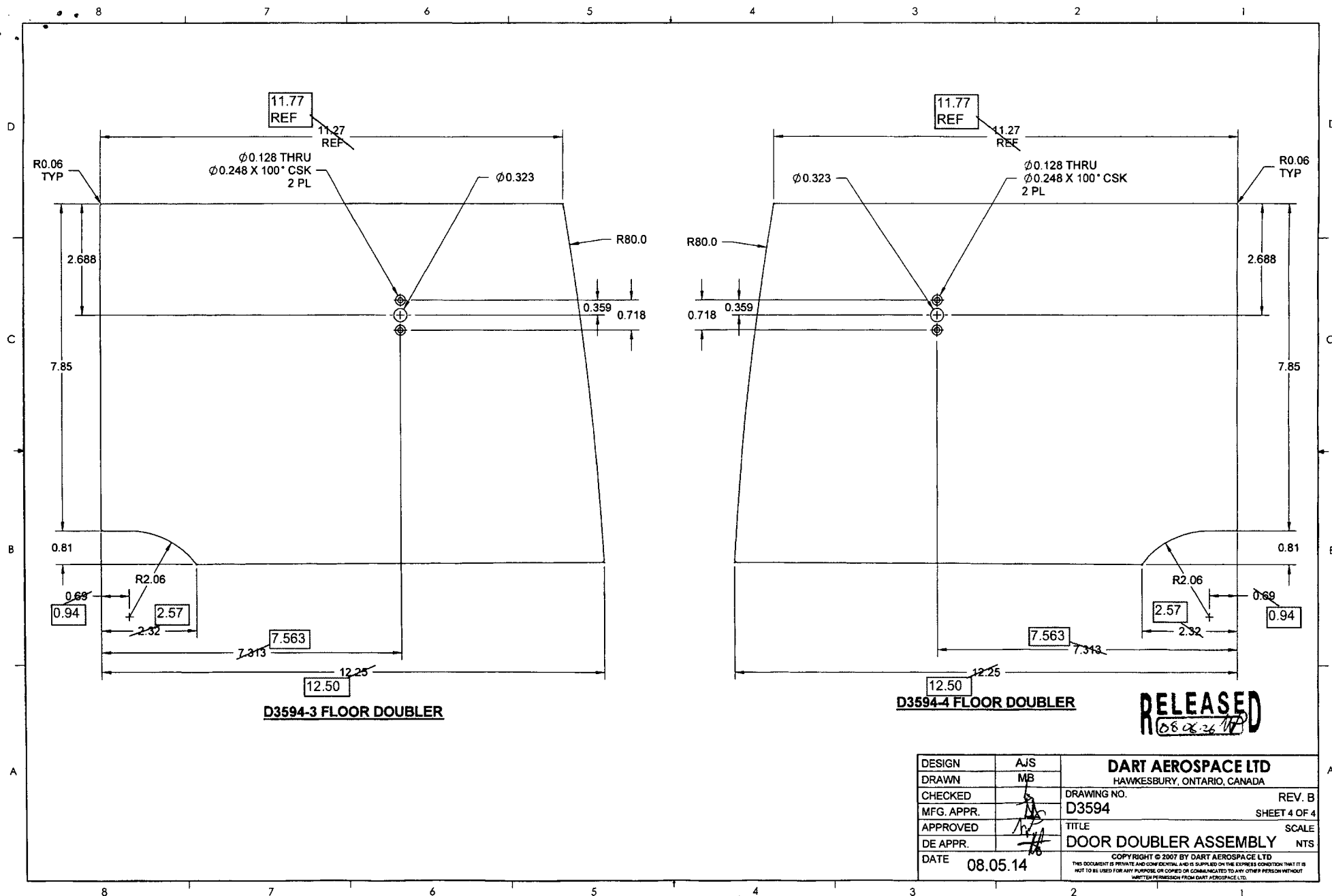
D3594-044 FLOOR DOUBLER ASSEMBLY

NOTES:

- 1) MATERIAL: -3 & -4
6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK,
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-043/-044" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WEIGHT -043 & -044: 0.80 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3594	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
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108-06-22-10



DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	MB		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3594	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOOR DOUBLER ASSEMBLY	NTS
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7.0 PARTS LIST - PILOT DOOR MODIFICATION KITS

Qty -015	Qty -023	Part Number	Description
X		D412-698-015	DOOR SUPPORT KIT
	X	D412-698-023	AUTOMATIC DOOR OPENER KIT
2		D3200-1	DOOR POST BLOCK
2		D3200-3	DOOR WEDGE
2		D3201-1	DOUBLER
1		D3201-3	ANGLE
1		D3201-4	ANGLE
	1	D3552-11	GAS SPRING
	1	D3594-5	DOOR DOUBLER
	1	D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	1	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
	2	D3622-1	BALL STUD
	1	MS21073L5	ANCHOR NUT
	2	MS20426AD4-4	RIVET
12		AN960JD10L	WASHER
	2	AN960JD516L	WASHER
12		MS21042L3	NUT (OR MS21042-3)
12		MS24693-S277	SCREW

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Revision: E

Date: 08.05.01